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<110> Donna T. Ward
     Andrew T. Watt

<120> ANTISENSE MODULATION OF EIF2C1 EXPRESSION

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ccgggccgcc tgacctccgc acgggtatat ggg atg gaa gcg gga ccc tcg gga   234
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gca gct gcg ggc gct tac ctg ccc ccc ctg cag cag gtg ttc cag gca   282
Ala Ala Ala Gly Ala Tyr Leu Pro Pro Leu Gln Gln Val Phe Gln Ala
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cct cgc cgg cct ggc att ggc act gtg ggg aaa cca atc aag ctc ctg   330
Pro Arg Arg Pro Gly Ile Gly Thr Val Gly Lys Pro Ile Lys Leu Leu
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gcc aat tac ttt gag gtg gac atc cct aag atc gac gtg tac cac tac   378
Ala Asn Tyr Phe Glu Val Asp Ile Pro Lys Ile Asp Val Tyr His Tyr
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gag gtg gac atc aag ccg gat aag tgt ccc cgt aga gtc aac cgg gaa   426
Glu Val Asp Ile Lys Pro Asp Lys Cys Pro Arg Arg Val Asn Arg Glu
                 60                  65                  70


gtg gtg gaa tac atg gtc cag cat ttc aag cct cag atc ttt ggt gat   474
Val Val Glu Tyr Met Val Gln His Phe Lys Pro Gln Ile Phe Gly Asp
                 75                  80                  85


cgc aag cct gtg tat gat gga aag aag aac att tac act gtc aca gca   522
Arg Lys Pro Val Tyr Asp Gly Lys Lys Asn Ile Tyr Thr Val Thr Ala
         90                  95                 100


ctg ccc att ggc aac gaa cgg gtc gac ttt gag gtg aca atc cct ggg   570
Leu Pro Ile Gly Asn Glu Arg Val Asp Phe Glu Val Thr Ile Pro Gly
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gaa ggg aag gat cga atc ttt aag gtc tcc atc aag tgg cta gcc att   618
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Glu Gly Lys Asp Arg Ile Phe Lys Val Ser Ile Lys Trp Leu Ala Ile
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Val Ser Trp Arg Met Leu His Glu Ala Leu Val Ser Gly Gln Ile Pro
                    140                 145                 150


gtt ccc ttg gag tct gtg caa gcc ctg gat gtg gcc atg agg cac ctg          714
Val Pro Leu Glu Ser Val Gln Ala Leu Asp Val Ala Met Arg His Leu
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gca tcc atg agg tac acc cct gtg ggc cgc tcc ttc ttc tca ccg cct          762
Ala Ser Met Arg Tyr Thr Pro Val Gly Arg Ser Phe Phe Ser Pro Pro
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gag ggc tac tac cac ccg ctg ggg ggt ggg cgc gaa gtc tgg ttc ggc          810
Glu Gly Tyr Tyr His Pro Leu Gly Gly Gly Arg Glu Val Trp Phe Gly
            185                 190                 195


ttt cac cag tct gtg cgc cct gcc atg tgg aag atg atg ctc aac att          858
Phe His Gln Ser Val Arg Pro Ala Met Trp Lys Met Met Leu Asn Ile
200                 205                 210                 215


gat gtc tca gcc act gcc ttt tat aag gca cag cca gtg att gag ttc          906
Asp Val Ser Ala Thr Ala Phe Tyr Lys Ala Gln Pro Val Ile Glu Phe
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atg tgt gag gtg ctg gac atc agg aac ata gat gag cag ccc aag ccc          954
Met Cys Glu Val Leu Asp Ile Arg Asn Ile Asp Glu Gln Pro Lys Pro
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ctc acg gac tct cag cgc gtt cgc ttc acc aag gag atc aag ggc ctg          1002
Leu Thr Asp Ser Gln Arg Val Arg Phe Thr Lys Glu Ile Lys Gly Leu
                250                 255                 260


aag gtg gaa gtc acc cac tgt gga cag atg aag agg aag tac cgc gtg          1050
Lys Val Glu Val Thr His Cys Gly Gln Met Lys Arg Lys Tyr Arg Val
                265                 270                 275


tgt aat gtt acc cgt cgc cct gct agc cat cag aca ttc ccc tta cag          1098
Cys Asn Val Thr Arg Arg Pro Ala Ser His Gln Thr Phe Pro Leu Gln
280                 285                 290                 295


ctg gag agt gga cag act gtg gag tgc aca gtg gca cag tat ttc aag          1146
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cag aaa tat aac ctt cag ctc aag tat ccc cat ctg ccc tgc cta caa   1194
Gln Lys Tyr Asn Leu Gln Leu Lys Tyr Pro His Leu Pro Cys Leu Gln
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gtt ggc cag gaa caa aag cat acc tac ctt ccc cta gag gtc tgt aac   1242
Val Gly Gln Glu Gln Lys His Thr Tyr Leu Pro Leu Glu Val Cys Asn
            330   335   340

att gtg gct ggg cag cgc tgt att aag aag ctg acc gac aac cag acc   1290
Ile Val Ala Gly Gln Arg Cys Ile Lys Lys Leu Thr Asp Asn Gln Thr
            345   350   355

tcg acc atg ata aag gcc aca gct aga tcc gct cca gac aga cag gag   1338
Ser Thr Met Ile Lys Ala Thr Ala Arg Ser Ala Pro Asp Arg Gln Glu
360   365   370   375

gag atc agt cgc ctg atg aag aat gcc agc tac aac tta gat ccc tac   1386
Glu Ile Ser Arg Leu Met Lys Asn Ala Ser Tyr Asn Leu Asp Pro Tyr
                 380   385   390

atc cag gaa ttt ggg atc aaa gtg aag gat gac atg acg gag gtg aca   1434
Ile Gln Glu Phe Gly Ile Lys Val Lys Asp Asp Met Thr Glu Val Thr
            395   400   405

ggg cga gtg ctg ccg gcg ccc atc ttg cag tac ggc ggc cgg aac cgg   1482
Gly Arg Val Leu Pro Ala Pro Ile Leu Gln Tyr Gly Gly Arg Asn Arg
            410   415   420

gcc att gcc aca ccc aat cag ggt gtc tgg gac atg cgg ggg aaa cag   1530
Ala Ile Ala Thr Pro Asn Gln Gly Val Trp Asp Met Arg Gly Lys Gln
            425   430   435

ttc tac aat ggg att gag atc aaa gtc tgg gcc atc gcc tgc ttc gca   1578
Phe Tyr Asn Gly Ile Glu Ile Lys Val Trp Ala Ile Ala Cys Phe Ala
440   445   450   455

ccc caa aaa cag tgt cga gaa gag gtg ctc aag aac ttc aca gac cag   1626
Pro Gln Lys Gln Cys Arg Glu Glu Val Leu Lys Asn Phe Thr Asp Gln
                460   465   470

ctg cgg aag att tcc aag gat gcg ggg atg cct atc cag ggt caa cct   1674

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Leu Arg Lys Ile Ser Lys Asp Ala Gly Met Pro Ile Gln Gly Gln Pro
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tgt ttc tgc aaa tat gca cag ggg gca gac agc gtg gag cct atg ttc    1722
Cys Phe Cys Lys Tyr Ala Gln Gly Ala Asp Ser Val Glu Pro Met Phe
        490             495             500
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cgg cat ctc aag aac acc tac tca ggg ctg cag ctc att att gtc atc    1770
Arg His Leu Lys Asn Thr Tyr Ser Gly Leu Gln Leu Ile Ile Val Ile
        505             510             515
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ctg cca ggg aag acg ccg gtg tat gct gag gtg aaa cgt gtc gga gat    1818
Leu Pro Gly Lys Thr Pro Val Tyr Ala Glu Val Lys Arg Val Gly Asp
520             525             530             535
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aca ctc ttg gga atg gct acg cag tgt gtg cag gtg aag aac gtg gtc    1866
Thr Leu Leu Gly Met Ala Thr Gln Cys Val Gln Val Lys Asn Val Val
                540             545             550
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aag acc tca cct cag act ctg tcc aac ctc tgc ctc aag atc aat gtc    1914
Lys Thr Ser Pro Gln Thr Leu Ser Asn Leu Cys Leu Lys Ile Asn Val
                555             560             565
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aaa ctt ggt ggc att aac aac atc cta gtc cca cac cag cgc tct gcc    1962
Lys Leu Gly Gly Ile Asn Asn Ile Leu Val Pro His Gln Arg Ser Ala
            570             575             580
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gtt ttt caa cag cca gtg ata ttc ctg gga gca gat gtt aca cac ccc    2010
Val Phe Gln Gln Pro Val Ile Phe Leu Gly Ala Asp Val Thr His Pro
        585             590             595
```

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cca gca ggg gat ggg aaa aaa cct tct atc aca gca gtg gta ggc agt    2058
Pro Ala Gly Asp Gly Lys Lys Pro Ser Ile Thr Ala Val Val Gly Ser
600             605             610             615
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atg gat gcc cac ccc agc cga tac tgt gct act gtg cgg gta cag cga    2106
Met Asp Ala His Pro Ser Arg Tyr Cys Ala Thr Val Arg Val Gln Arg
                620             625             630
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cca cgg caa gag atc att gaa gac ttg tcc tac atg gtg cgt gag ctc    2154
Pro Arg Gln Glu Ile Ile Glu Asp Leu Ser Tyr Met Val Arg Glu Leu
                635             640             645
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ctc atc caa ttc tac aag tcc acc cgt ttc aag cct acc cgc atc atc    2202
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Leu Ile Gln Phe Tyr Lys Ser Thr Arg Phe Lys Pro Thr Arg Ile Ile
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ttc tac cga gat ggg gtg cct gaa ggc cag cta ccc cag ata ctc cat    2250
Phe Tyr Arg Asp Gly Val Pro Glu Gly Gln Leu Pro Gln Ile Leu His
    665                 670                 675


tat gag cta ctg gcc att cgt gat gcc tgc atc aaa ctg gaa aag gac    2298
Tyr Glu Leu Leu Ala Ile Arg Asp Ala Cys Ile Lys Leu Glu Lys Asp
680                 685                 690                 695


tac cag cct ggg atc act tat att gtg gtg cag aaa cgc cat cac acc    2346
Tyr Gln Pro Gly Ile Thr Tyr Ile Val Val Gln Lys Arg His His Thr
                    700                 705                 710


cgc ctt ttc tgt gct gac aag aat gag cga att ggg aag agt ggt aac    2394
Arg Leu Phe Cys Ala Asp Lys Asn Glu Arg Ile Gly Lys Ser Gly Asn
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atc cca gct ggg acc aca gtg gac acc aac atc acc cac cca ttt gag    2442
Ile Pro Ala Gly Thr Thr Val Asp Thr Asn Ile Thr His Pro Phe Glu
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ttt gac ttc tat ctg tgc agc cac gca ggc atc cag ggc acc agc cga    2490
Phe Asp Phe Tyr Leu Cys Ser His Ala Gly Ile Gln Gly Thr Ser Arg
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cca tcc cat tac tat gtt ctt tgg gat gac aac cgt ttc aca gca gat    2538
Pro Ser His Tyr Tyr Val Leu Trp Asp Asp Asn Arg Phe Thr Ala Asp
760                 765                 770                 775


gag ctc cag atc ctg acg tac cag ctg tgc cac act tac gta cga tgc    2586
Glu Leu Gln Ile Leu Thr Tyr Gln Leu Cys His Thr Tyr Val Arg Cys
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aca cgc tct gtc tct atc cca gca cct gcc tac tat gcc cgc ctg gtg    2634
Thr Arg Ser Val Ser Ile Pro Ala Pro Ala Tyr Tyr Ala Arg Leu Val
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gct ttc cgg gca cga tac cac ctg gtg gac aag gag cat gac agt gga    2682
Ala Phe Arg Ala Arg Tyr His Leu Val Asp Lys Glu His Asp Ser Gly
            810                 815                 820


gag ggg agc cac ata tcg ggg cag agc aat ggg cgg gac ccc cag gcc    2730
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Glu Gly Ser His Ile Ser Gly Gln Ser Asn Gly Arg Asp Pro Gln Ala
      825                 830                 835
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```
ctg gcc aaa gcc gtg cag gtt cac cag gat act ctg cgc acc atg tac   2778
Leu Ala Lys Ala Val Gln Val His Gln Asp Thr Leu Arg Thr Met Tyr
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Phe Ala
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